

# What Has Long Hair And Purple Feet?

Express the number in each statement below in scientific notation. Select your answer from the two choices given. Write the letter of the correct choice in each box at the bottom of the page that contains the statement number.

1	The mean distance from the surface of the earth to the surface of the moon is 376,000 kilometers. (E) $3.76 \times 10^5$ (R) $3.76 \times 10^4$
2	The tallest structure in the world is the Warszawa Radio Mast in Plock, Poland, completed in May 1974. It measures 650 meters in height. (S) $6.5 \times 10^2$ (A) $65 \times 10^2$
3	The heaviest bell in the world is the Tsar Kolokol, cast in 1733 in Moscow, U.S.S.R. It weighs 196,000 kilograms. (I) $1.96 \times 10^3$ (H) $1.96 \times 10^5$
4	One light-year, the distance traveled by light in one year, is 9,460,000,000,000 kilometers. (T) $9.46 \times 10^{10}$ (O) $9.46 \times 10^{12}$
5	Sirius A (the Dog Star) is the brightest star visible in the heavens. It has a mass of 46,500,000,000,000,000,000,000,000,000 kilograms. (D) $4.65 \times 10^{30}$ (K) $4.65 \times 10^{31}$
6	The nearest star beyond our sun is the very faint <i>Proxima Centauri</i> , which is 40,300,000,000,000 kilometers from the earth. (T) $4.03 \times 10^{13}$ (S) $4.03 \times 10^{11}$
7	The smallest known insects are the "hairy-winged" beetles of the Trichopterygidae family. They measure only 0.02 centimeters in length. (B) $2 \times 10^{-3}$ (M) $2 \times 10^{-2}$
8	The wavelength of yellow light is 0.000058 centimeters. (A) $5.8 \times 10^{-5}$ (U) $5.8 \times 10^{-4}$
9	The wavelength of one type of X-ray is 0.0000000128 centimeters. (N) $1.28 \times 10^{-8}$ (L) $1.28 \times 10^{-10}$
10	The smallest identified virus is the potato spindle tuber virus, which has a diameter of less than 0.000002 centimeters. (I) $2 \times 10^{-6}$ (U) $2 \times 10^{-5}$
11	One of the least stable atomic particles is the rho prime meson, which has a lifetime of 0.00000000000000000000000016 seconds. (L) $1.6 \times 10^{-24}$ (P) $1.6 \times 10^{-23}$
12	The mass of an electron is 0.000000000000000000000000009 grams. (F) $9 \times 10^{-26}$ (W) $9 \times 10^{-28}$

11	10	4	9	6	3	8	6	7	8	5	1	2	10	6	2	4	12	9	12	10	9	1
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